

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

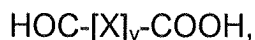
Listing of Claims:

1. (Currently Amended) A method for producing reversibly crosslinked cellulose ethers having lump-free stirrability and solvation delay on stirring into aqueous solutions containing said reversibly crosslinked cellulose ether, in which cellulose ethers having free OH groups are first admixed but not dissolved in water or in an organic suspension medium

at a temperature in the range from 0 to 40 °C with chemical compounds containing at least one aldehyde group and at least one acid group, and in which the acid groups and aldehyde groups of the chemical compounds are then reacted with the OH groups of the cellulose ethers to form an ester bond or hemiacetal bond;

wherein the amount of chemical compound containing at least one aldehyde group and at least one acid group is in the range from 0.01 to 0.1 mol per mole of cellulose ether

and the chemical compound having at least one acid group and at least one aldehyde group is a compound of the general chemical formula



where X is a divalent alkylene group which has from 1 to 6 carbon atoms and can be saturated and straight-chain or branched, or a divalent saturated cyclo- or bicycloalkylene group having from 3 to 10 carbon atoms, or a divalent arylene group having from 6 to 10 carbon atoms, where these groups can further bear one or more substituents R which, in addition to hydrogen, can also be alkyl radicals having up to 4 carbon atoms, alkoxy radicals having up to 4 carbon atoms, OH groups, halogens, nitro groups, nitrile groups or mixtures thereof, and where y can be either 0, 1 or 2,

wherein the chemical compounds containing at least one aldehyde group and at least one acid group are not released upon dissolving said reversibly crosslinked cellulose ether in a neutral or weakly acidic aqueous solution,

and the cellulose ethers having free OH groups are selected from ~~methylecellulose~~, ethylecellulose[[,]] methylhydroxyethylcellulose, methylhydroxypropylcellulose or ethylhydroxyethylcellulose.

2. (Canceled)

3. (Canceled)

4. (Previously Presented) The method as claimed in claim 1, wherein the chemical compound having at least one acid group and at least one aldehyde group is glyoxylic acid.

5. (Canceled)

6. (Canceled)

7. (Previously Presented) The method as claimed in claim 1, wherein the cellulose ethers are admixed with the compound containing at least one aldehyde group and at least one acid group over a time period in the range of from 10 to 60 min.

8. (Previously Presented) The method as claimed in claim 1, wherein the acid groups and the aldehyde groups are reacted with the OH groups of the cellulose ethers at a temperature in the range from 50 to 150 °C over a time period in the range of from 1 to 120 min.

9. (Previously Presented) The method as claimed in claim 1, wherein the cellulose ethers are first admixed in organic suspension media selected from acetone, lower alcohols having from 1 to 4 carbon atoms, diethyl ether, ethers having alkyl chains having up to 8 carbon atoms per chain, cyclic ethers, ethylene glycol dimethyl ether, diethylene glycol dimethyl ether, triethylene

glycol dimethyl ether, tetraethylene glycol dimethyl ether, straight-chain and branched hydrocarbons having up to 12 carbon atoms, cyclic hydrocarbon compounds, or aromatic hydrocarbon compounds.

10. (Canceled)

11. (Previously Presented) A method as claimed in Claim 1, wherein the cellulose ether is pre-moistened with 40 to 80 % water, based on the amount of cellulose ether, or pre-suspended in 30 to 60% organic suspension medium, based on the amount of cellulose ether prior to admixing.

12. (Canceled)

13. (Canceled)

14. (Currently Amended) A method for producing reversibly crosslinked cellulose ethers consisting of cellulose ether and chemical compounds containing at least one aldehyde group and at least one acid group, said cellulose ethers having lump-free stirrability and solvation delay on stirring into aqueous solutions, said method comprising

pre-moistening cellulose ether having free OH groups with 40 to 80 % water, based on the amount of cellulose ether,

admixing the pre-moistened cellulose ether having free OH groups with water at a temperature in the range from 0 to 40 °C and chemical compounds containing at least one aldehyde group and at least one acid group, the cellulose ether not being dissolved in the water;

comminuting said admixed cellulose ether composition;

milling the comminuted cellulose ether composition; and

drying the milled cellulose ether composition to react the acid groups and aldehyde groups of the chemical compounds with the OH groups of the cellulose ethers to form an ester bond or hemiacetal bond,

wherein the cellulose ether having free OH groups is selected from methylhydroxyethylcellulose, methylhydroxypropylcellulose or ethylhydroxyethylcellulose.

15. (Currently Amended) A method for producing reversibly crosslinked cellulose ethers consisting of cellulose ether and chemical compounds containing at least one aldehyde group and at least one acid group, said cellulose ethers having lump-free stirrability and solvation delay on stirring into aqueous solutions said method comprising

pre-suspending cellulose ether having free OH groups in 30 to 60% organic suspension medium, based on the amount of cellulose ether,

admixing the pre-suspended cellulose ether having free OH groups with an organic suspension medium at a temperature in the range from 0 to 40 °C and chemical compounds containing at least one aldehyde group and at least one acid group, the cellulose ether not being dissolved in the suspension medium;

filtering the admixed cellulose ether composition

drying the filtered cellulose ether composition;

comminuting the filtered cellulose ether composition; and

heating the comminuted cellulose ether composition to react the acid groups and aldehyde groups of the chemical compounds with the OH groups of the cellulose ethers to form an ester bond or hemiacetal bond at a temperature ranging from 50 to 105 °C,

wherein the cellulose ether having free OH groups is selected from methylhydroxyethylcellulose, methylhydroxypropylcellulose or ethylhydroxyethylcellulose.

16. (New) A method for producing reversibly crosslinked cellulose ethers having lump-free stirrability and solvation delay on stirring into aqueous solutions containing said reversibly crosslinked cellulose ether, in which cellulose ethers having free OH groups are first admixed but not dissolved in water or in an organic suspension medium

at a temperature in the range from 0 to 40 °C with chemical compounds containing at least one aldehyde group and at least one acid group, and in which the acid groups and aldehyde groups of the chemical compounds are then reacted with the OH groups of the cellulose ethers to form an ester bond or hemiacetal bond;

wherein

(i) the amount of chemical compound containing at least one aldehyde group and at least one acid group is in the range from 0.01 to 0.1 mol per mole of cellulose ether,

(ii) the chemical compound having at least one acid group and at least one aldehyde group is glyoxylic acid, and

(iii) the glyoxylic acid is not released upon dissolving said reversibly crosslinked cellulose ether in a neutral or weakly acidic aqueous solution.